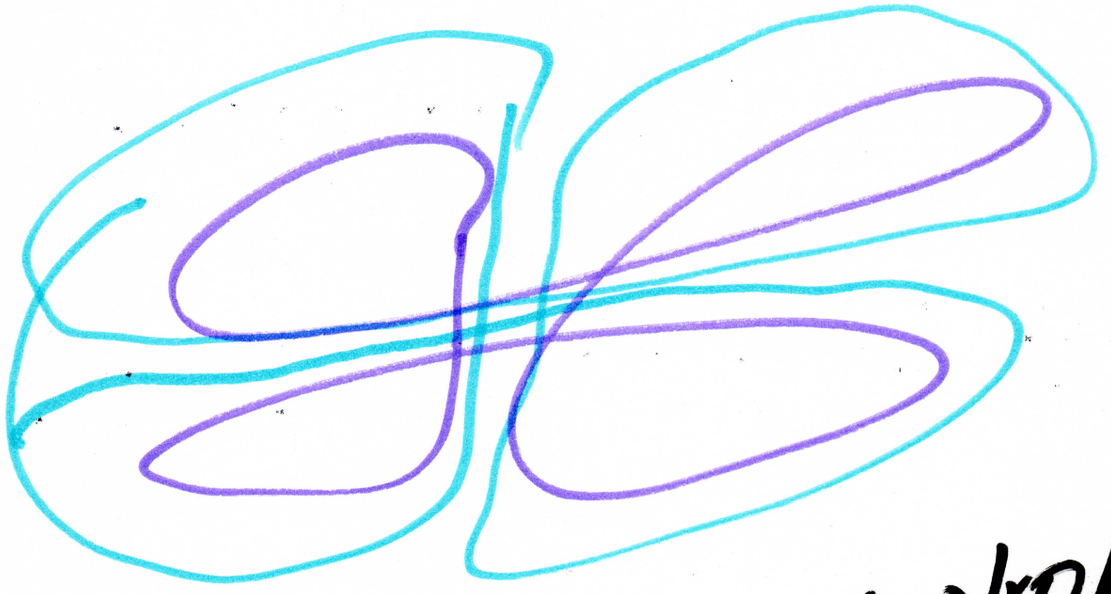
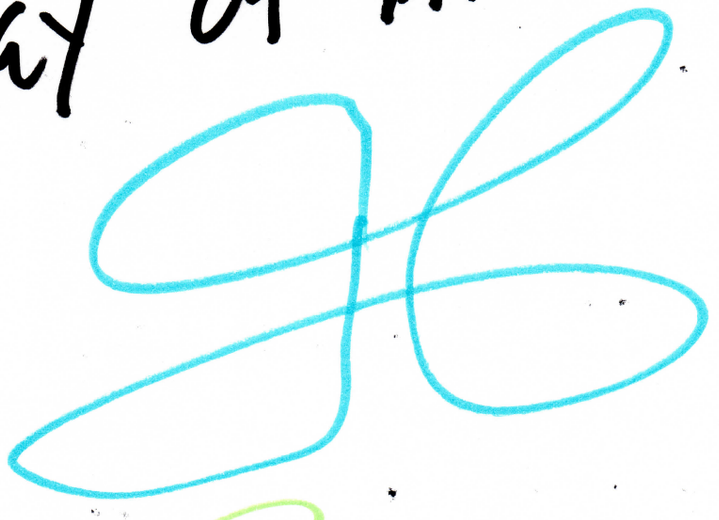


THE KEY of Pharmakokinetics



2018 NOV

LET'S PRESCRIBE

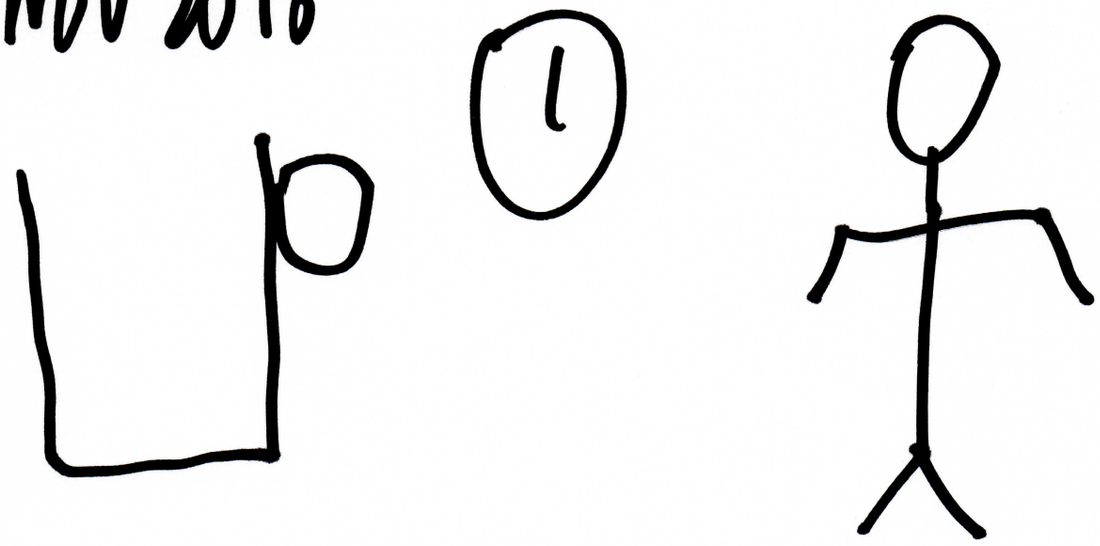
A Thing or a med

2018

ABOO . B. S. Fatally

Ø (1) NOU

Nov 2018

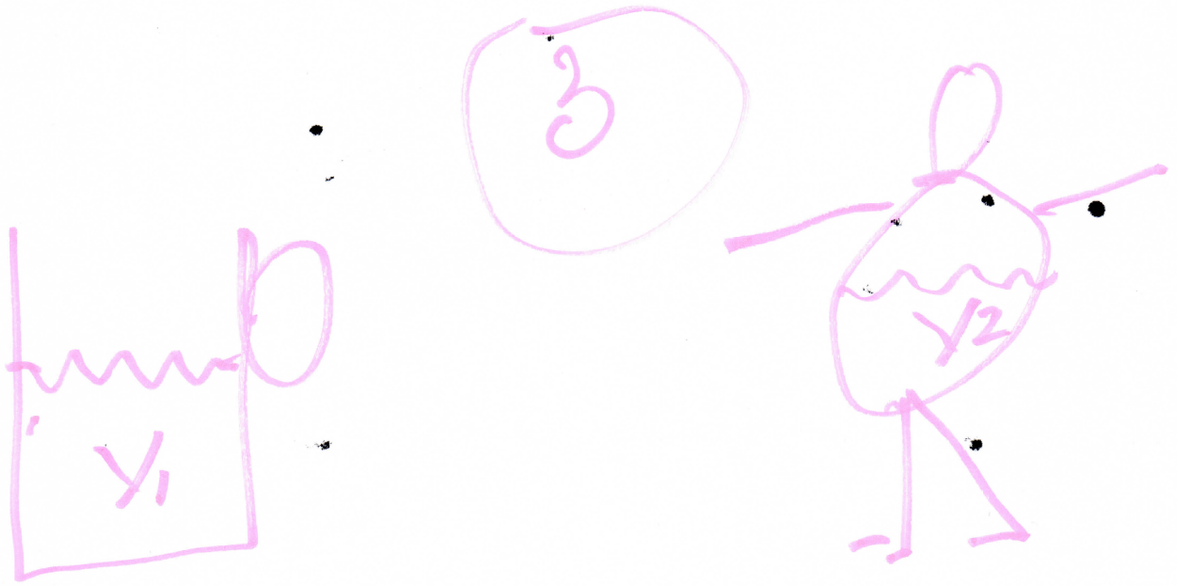


A Container

A Person

FILL Container with Water

A Person already have a volume



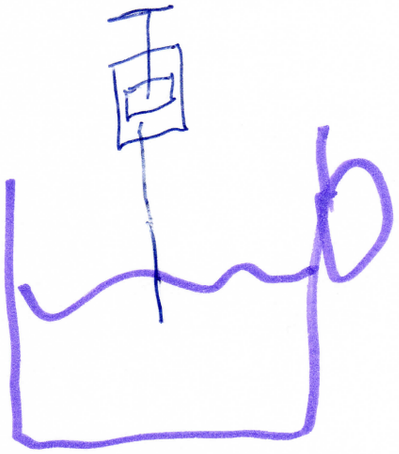
V = volume = Unknown amount

Add 1 gm of Salt in V_1

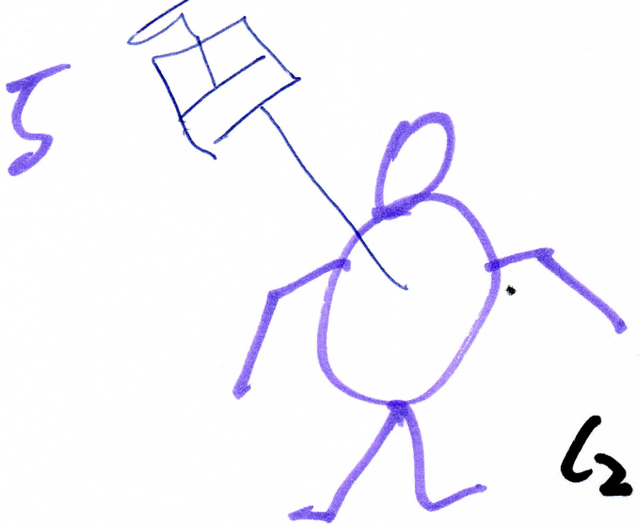
(4)

Give One Tab of 500mg Paracetamol

Nov 2018



C_1



C_2

Draw a sample from container C_1 and C_2

C_1 is container

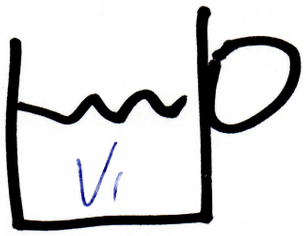
C_2 is Person

Send both to lab for Test of Concentration

DO

Flow

LAB Results



1mg/ml of Salt for 1gm of Salt

8mg/L of Paracetamol for 500ml

Nov 2018

SALT

for 1mL

there is

1mg

so

for

1000mL

there is

1000mL

or

1 LITRE

Paracetamol

for 8mg

there is

1000mL

so

for

1mL

there is

0.008mg

Vd =

Volume of

distribution

is the Vd

5 l Vd

0.008 x 5l = 0.40

0.40 x 1000 = 40

40 mg of Paracetamol

p6

So given ① a volume distribution ② a plasma concentration after ① hour ③ the paracetamol concentration is 408

To Summarize.

(A) EVERY DRUG HAS a volume of distribution

(B) Give a known amount

(C) Collect the lab result for concentration

(D) Multiply Vd x concentration

THE AMOUNT OF Drug in the body is THUS OBTAINED

IMPLEMENTATION

When the amount of drug in the body is known at any one time, the toxicity, clinically, peak level is thus known for maximum treatment against the disease or microorganism

PA PO

BEGIN

Google a drug

for its

Volume of Distribu

tion

then take

the Concentration

and

GET THE Amount of Drug

46

USE THE
Amount of Drug in
the body to
monitor treatment,
toxicity and Efficacy